EXPLORATION TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

May 9, 2005

TO: Internal File

THRU: Stephen J. Demczak, Environmental Scientist III/Engineering, Team Lead

FROM: Jerriann Ernstsen, Ph.D., Environmental Scientist III/Biology

RE: Minor Coal Exploration, PacifiCorp, Deer Creek Mine, C/015/018, Task ID

<u>#2177</u>

SUMMARY:

The Division received the Notice of Intention in March 2005 that addresses minor coal exploration drilling of six holes. This memo reviews the biology and archeology sections of the notice.

EXPLORATION TECHNICAL ANALYSIS:

COMPLIANCE DUTIES

Regulatory Reference: 30 CFR 772.13; R645-202.

OPERATIONAL STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-100.

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Analysis:

The Permittee plans to core-drill four 3" diameter holes: 2005-1 through 2005-4. The plan shows that all drill holes are located within the Mill Fork Lease. The 7.5 Minute Quadrangle USGS map that covers the project area is the Rilda quadrangle; Township 16 South and Range 6 East with Sections 11, 14, and 22. The elevation of the project sites range from 9460' – 9700'. Drill holes staging sites for 2005-1 through 2005-4 in Upper Joes Valley or lower end of Mill Fork Canyon. (Refer to 2004 raptor map in 2005 Plan).

The project will include drilling 2005-1 through 2005-4 using a helicopter-transported drill rig in accordance with the Utah State Coal Lease ML-48258 application for the Notice of Intention of Conduct Minor Coal Exploration. The project will start on July 15 and should take no longer 60 days to complete.

Senco-Phenix recommended that PacifiCorp obtain waivers from the USFS archeologist for the 2001 drill hole project. They based their recommendation on remoteness of the sites and that PacifiCorp will use helicopters to access the drill hole sites, which minimizes impact to environmental resources. Senco-Phenix also recommended that there is little likelihood that future drill hole projects in the area will impact archeological resources.

The Permittee has submitted requests to the USFS to waiver the archeology survey requirement for subsequent helicopter drill hole projects within the Mill Fork lease area. The USFS has waived on-the-ground surveys, but required a Class I survey.

The Permittee will avoid all known historical resources during the exploration program. In the event that exploration uncovers historical resources, all work near the resources must stop and the Permittee must notify the Division. We will then work with appropriate agencies and the Permittee to develop a strategy to avoid or mitigate the effects of the exploration program.

Biology

<u>Plants</u>

The vegetation community types include cottonwood/aspen/fir/dogwood and spruce/fir coniferous interspersed with mixed communities. Previous reports for the area show that there are no TES plant species (Vol. 12).

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<u>Animals</u>

The area is designated as critical winter range for elk, and high priority summer range for deer and elk. The Permittee will initiate the 2005 drill project on July 15, which is after deer and elk exclusionary wintering and calving periods - December 1 through April 15 and May 15 through July 5, respectively.

The Permittee conducts annual raptor over-flight surveys. All nests observed from previous surveys are outside the 0.5-mile buffer zone to the 2005 drill hole site. Nests 80 and 81 are within the 0.5-mile buffer zone for the Mill Fork staging area. The flight path from the Mill Fork to the Joes Valley staging areas is within the 0.5-mile buffer zone for nests 78, 79, 963, 80, and 81. The Permittee will initiate the 2005 drill project on July 15, which is after raptor exclusionary period - February 1 through July 1. All non-essential flights will be at 1000'.

Previously, the USFS stipulated that the Permittee must implement the special monitoring program if raptor nests are listed as active during the spring over-flight survey. The USFS issued this stipulation because the Permittee requested to initiate the project during the raptor exclusionary period. (See TA_EXP_1743.PDF for details of the program).

The Mexican spotted owl exclusionary period is March 1 through August 31. Previous reports show that the elevation for the 2005 project sites are above this species preferred nesting habitat of below 8,000' (Vol. 12).

The drill-hole operations will require 0.74 acre-feet of water (Refer to p. 13 in 2005 Plan). The USFWS requires mitigation for endangered fish species of the Colorado River when the amount of water consumption exceeds 100 acre-feet.

Findings:

Information provided in the plan meets the minimum Operational Standards - Biology and Archeology requirements of the regulations.

RECLAMATION STANDARDS

Regulatory Reference: 30 CFR 772.13; R645-202-200.

Analysis:

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Revegetation

The Permittee expects minor surface disturbances from the drilling activities. The size of the work pads for the holes are 40' x 40'. The Permittee will remove deadfall from the sites in preparation for the drill-hole pads. Preparation will not include removing vegetation unless removal is necessary for staff safety. The reclamation project includes removing debris and contaminated soil, recontouring, broadcast seeding, and replacing deadfall. The seed mix includes native grass and forb species.

Findings:

Information provided in the plan meets the minimum Reclamation Standards - Revegetation requirements of the regulations.

RECOMMENDATIONS:

The Division should approve this Notice of Intention to Conduct Minor Coal Exploration.

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